

**BY ORDER OF THE COMMANDER
AIR MOBILITY COMMAND**



AIR FORCE INSTRUCTION 21-123

**AIR MOBILITY COMMAND
Supplement 1**

15 MAY 1999

Maintenance

AIR FORCE GOLD PROGRAM

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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SUMMARY OF REVISIONS

The scope of the AMC Aircraft Repair Enhancement Program (AREP) is to identify the AMC tailored Gold Program. Implementation of this program is at the unit LG/CC discretion. It is an optional program. This program identifies possible base level repair and contract initiatives. Once all the requirements of the Gold process (see figure 1 of AFI 21-123) have been accomplished and the repair initiative is formalized, establishing the repair capability is authorized. Once the repair capability is established, AREP should continue to monitor the repair actions for at least one year to ensure the repair initiative still meets the requirements of figure 1 of AFI 21-123.

3. HQ AMC/LGQP is the AMC AREP Manager.

3.2.1. (Added) Ensure AREP will not interfere with warranty and the DR processes IAW 00-35D-54.

3.2.2. (Added) Unit AREP managers will ensure supply demand data and serviceable balances are checked to prevent the repair or accumulation of items that have excess Air Force stock levels. Supply procedures for AREP items must be utilized to ensure AREP initiatives are documented and demand/repair cycle data recorded to ensure visibility within the supply system.

3.2.3. (Added) Responsibilities of the Unit AREP manager include:

3.2.3.1. (Added) Forwarding to the AMC AREP Manager their name, rank, office symbol and phone number.

- 3.2.3.2. (Added) Sending items to appropriate repair shop for evaluation.
- 3.2.3.3. (Added) Assisting shops in obtaining required technical data, equipment or parts to support the evaluation process.
- 3.2.3.4. (Added) Ensuring all supply DIFM and tracking requirements are maintained.
- 3.2.3.5. (Added) Seeking off-base sources if no on-base capability exists.
- 3.2.3.6. (Added) Contacting Single Manager concerning repair feasibility, pending modifications, or other initiatives.
- 3.2.3.7. (Added) Inquiring about civilian contractors.
- 3.2.3.8. (Added) Providing the AMC AREP Manager with a quarterly report. (See paragraph 3.7.).
- 3.2.3.9. (Added) Reevaluating the initiative after repair capabilities are determined and consider cost effectiveness of repair and mission requirements.
- 3.2.3.10. (Added) Notifying the AREP lead units of recommended new repair method or reasons to discontinue initiative. (see paragraph 7.3.1).
- 3.4.1. (Added) XB3 (Expendable) items will be processed and controlled through normal maintenance functions using specific procedures outlined T.O. 00-20-3, Section I. When it is determined to be cost effective (IAW TO 00-20-3) to continue repair of an XB3 item, the user must initiate action to change the expendability, recoverability, reparability code (ERRC) to XF3. Assigning ERRC XF3 will allow the tracking and accumulation of repair data for the item. Procedures for changing the ERRC are located in AFMAN 23-110, Volume II, Part Two, Chapter 27.
- 3.4.2. (Added) Units will identify their AREP section as a repair center for their base in the Standard Base Supply System (SBSS). Unit AREP Manager monitors parts in the repair cycle evaluation process and ensures accurate tracking and accountability.
- 3.4.3. (Added) Each AREP repaired part, as a minimum will be marked with a mailing label type sticker to include, originating unit/office symbol, DSN, and warranty expiration date. If unable to place on part, attach label to DD Form 1574, **Serviceable Tab - Material**. Each sticker will be clearly visible and preferably color coded.
- 3.4.4. (Added) See figure 1 and 2 (of this supplement) for standard AMC Supply AREP turn-in procedures.
- 3.5. Cost savings are defined as PFMR credit minus repair cost and transportation cost. Cost avoidance is defined as Air Force initial replacement cost. Units will collect cost savings fund distributions in an account dispersed by the logistics group commander as determined most advantageous for the unit mission or quality of life for assigned personnel.
- 3.6. (Added) LG/CC or equalivant assigns a unit AREP Manager to logistics group quality assurance and an AREP point of contact within base supply. The unit AREP manager should be a senior noncommissioned officer with a strong maintenance or supply background. The AREP manager is the central focal point for all AREP initiatives throughout the AREP process. The unit AREP management office composition is limited only by the available wing resources. Recommended participation or composition in the AREP office should include the unit AREP manager, supply technician, two circuits card repair (CCR) technicians, and one mechanical technician. This not a manpower earning work center.

3.7. (Added) Unit AREP managers will submit a quarterly report (RCS: AMC-LGQ(Q)9904) to HQ AMC AREP manager each quarter. This report will include the following information: (1) Total number of items repaired during the quarter. (2) Total cost savings for the quarter. (3) Total cost avoidance for the quarter. Send reports to HQ AMC/LGQP either by mail or e-mail, not later than 15 days after the conclusion of the quarter (e.g., 15 January for the October-December quarter). 21 AF Units will also send a copy of this report to 21 AF/LGS. *This report is designated emergency status code C3 – Continue reporting during emergency conditions, delayed precedence. Submit data requirements as prescribed, but they may be delayed to allow the submission of higher precedence reports. Submit by nonelectric means, if possible. Discontinue electronic reporting during MINIMIZE.*

6. Circuit Card Repair (CCR) is an optional program under AREP.

6.1. The unit AREP Manager has oversight responsibility for CCR, ensuring that their unit CCR personnel meets training certification/re-certification requirements identified in paragraph 6.1.1. Units will forward their CCR candidates to the USAF Gold Disk Management Office. The LG/CC or equivalent will appoint at CCR POC for units performing CCR. The unit AREP manager and CCR POC ensures minimum required circuit card analysis and repair tools are available, acts as base/wing central point of contact for Silver and Gold Disk development packages, and ensures unit end item test capability exists before repairs are performed.

6.1.1. (Added) Initial certification for technicians will be awarded upon successful completion of CCR training. Technicians certified in the minimum requirements for CCR are authorized to repair single and double-sided circuit card assemblies (CCAs) and other electronic assemblies, up to and including the removal and installation of multilead integrated circuits. Authorized repairs include surface repair of CCA laminate and printed circuit wiring, removal and application of conformal coatings and installation of wires to terminals. CCR technicians will be re-certified by the end of the eighteenth month after their initial certification or last recertification date. Listed below are the minimum requirements for CCR Certification.

6.1.1.1. (Added) Proficiency Tasks.

6.1.1.1.1. (Added) Introduction to soldering, including Electrostatic Discharge Precautions.

6.1.1.1.2. (Added) Identification of conformal coating.

6.1.1.1.3. (Added) Removal of conformal coating.

6.1.1.1.4. (Added) Removal/desoldering of components.

6.1.1.1.5. (Added) Preparation of components.

6.1.1.1.6. (Added) Installation of components.

6.1.1.1.7. (Added) Laminate repair, (patch repair).

6.1.1.1.8. (Added) Repair of printed circuit conductors.

6.1.1.1.9. (Added) Wire preparation and installation on terminals.

6.1.1.1.10. (Added) Removal and installation of multilead components.

6.1.1.1.11. (Added) Inspection and analysis of work.

6.1.1.2. (Added) Knowledge Tasks.

6.1.1.2.1. (Added) Safety precautions.

6.1.1.2.2. (Added) Use and maintenance of tools and equipment.

6.1.1.2.3. (Added) Conformal coating reapplication.

6.1.1.2.4. (Added) Laminate repair of edge/corner, warped, cracked, and through the board defects.

6.1.1.2.5. (Added) Wire splicing.

6.1.1.2.6. (Added) Limitations of the CCR technician.

7.3. AREP lead units will maintain a database of all AREP candidates within their MDS. Unit AREP managers will forward their repair initiatives to the appropriate lead wing. The AMC lead wings for each MDS are listed below.

<u>UNIT</u>	<u>BASE</u>	<u>MDS</u>
89 AW	Andrews AFB	VC-9, VC-25, C-137, C-20, and UH-1.
375 AW	Scott AFB	C-9,C-21
22 ARW	McConnell AFB	KC-135,
437 AW	Charleston AFB	C-17
60 AMW	Travis AFB	KC-10
463 AG	Little Rock AFB	C-130
305 AMW	McGuire AFB	C-141
436 AW	Dover AFB	C-5

Figure 1.1. AREP Issue/Turn-In Procedures (Added)

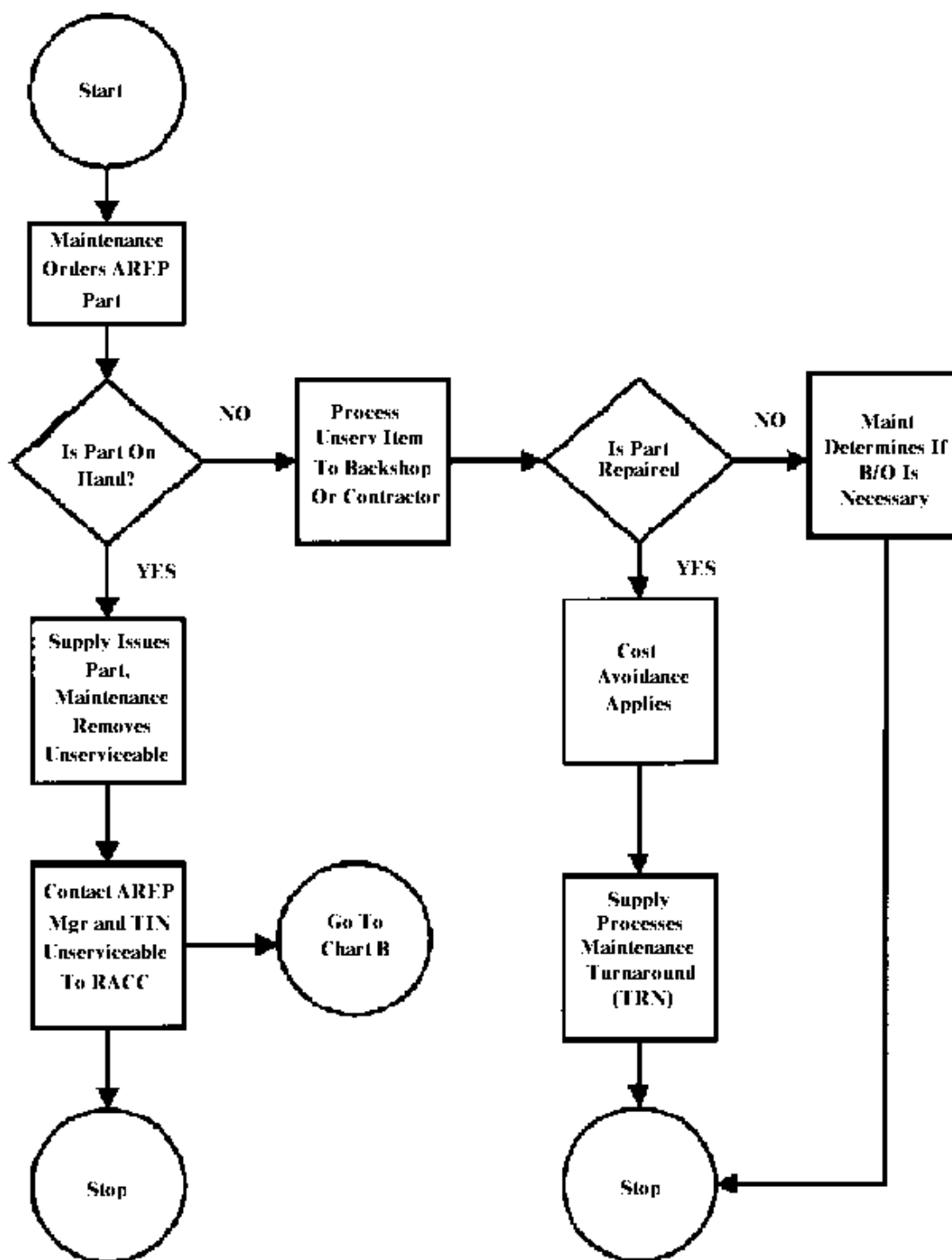
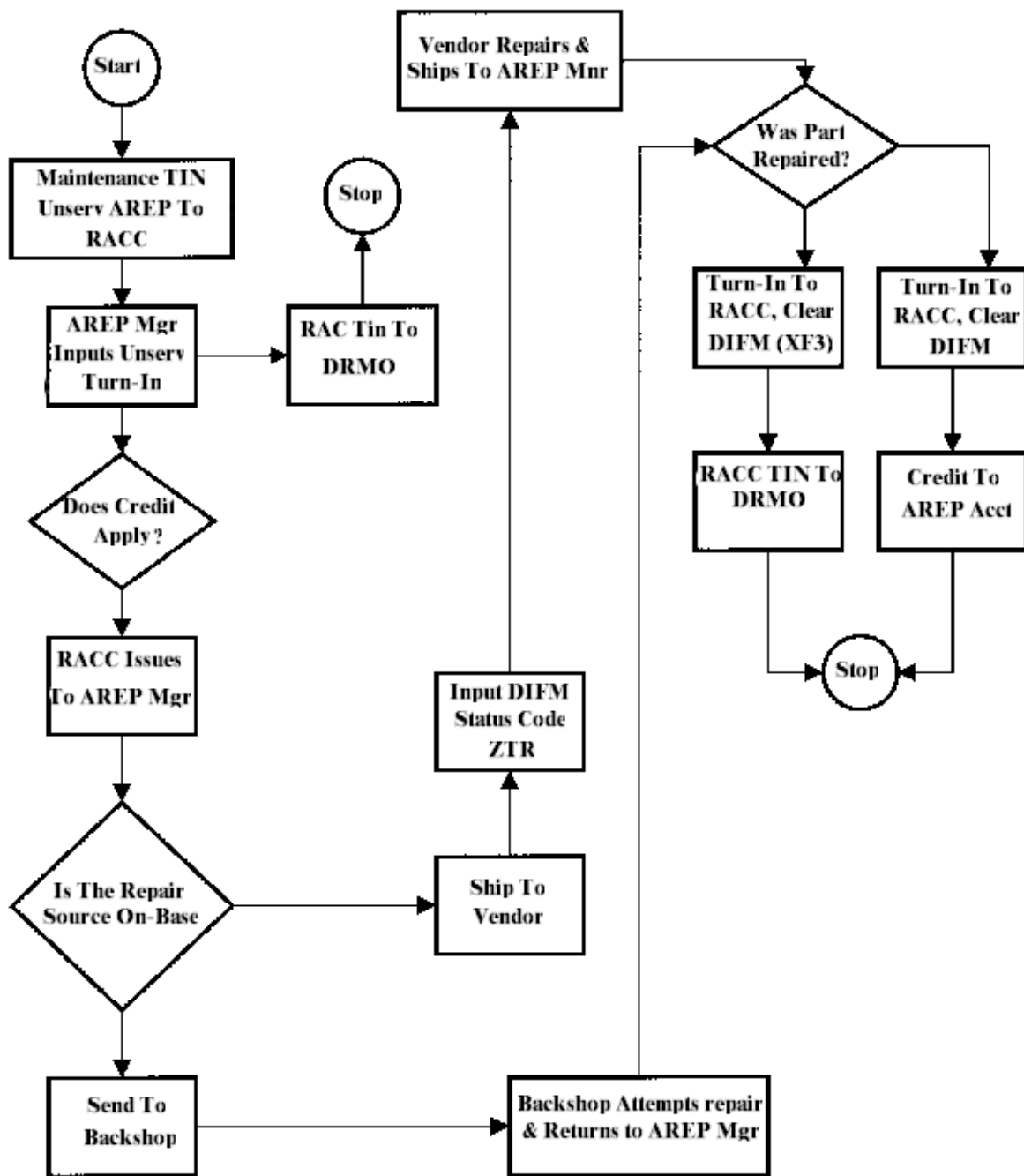


Figure 1.2. AREP Procedures (Added)



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